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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,560	11/06/2006	Olle Hemmingson	1000500-000385	3806

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BUCHANAN, INGERSOLL & ROONEY PC  
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EXAMINER
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PATEL, BHARAT C

ART UNIT	PAPER NUMBER
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3724

NOTIFICATION DATE	DELIVERY MODE
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11/28/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/576,560	<b>Applicant(s)</b> HEMMINGSON, OLLE	
	<b>Examiner</b> BHARAT C. PATEL	<b>Art Unit</b> 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-11 is/are pending in the application.
- 4a) Of the above claim(s) 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/31/08</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The following is a Final Office action in response to communication received on 8/26/08. Claim 3 is cancelled. Claims 1 and 6-9 are amended. Claim 11 is newly added. Therefore, claims 1-2 and 4-11 are pending and addressed below.

### ***Election/Restrictions***

2. Newly submitted claim 11 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: With respect to new claim 11, Applicant has introduced a new patentably distinct subcombination (group II as below).

I: Claim 5, drawn to a disc saw blade with the bottom of the groove having one projection for each driving link.

II: Claim 11, drawn to a disc saw blade having the construction of chain such that the connecting links are spaced radially outwardly with respect to radially outermost portions of the radial projections .

Inventions of group I and group II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, the subcombination of group I as claimed does not require the particulars of the subcombination of group II as claimed. The subcombination II has separate utility such as new claim 11 requires construction of chain such that the connecting links are spaced radially outwardly with respect to radially outermost portions of the radial projections and the subcombination,

Art Unit: 3724

of group I, does not. Conversely, the other claim 5 require such limitation as the bottom of the groove having one projection for each driving link while the new subcombination II does not. See MPEP § 806.05(d).

The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 11 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Objections***

3. The claims are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters such as “r0, rid, rsb and ru”, corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed

Art Unit: 3724

within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, and 4-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Carlton 5,048,389.

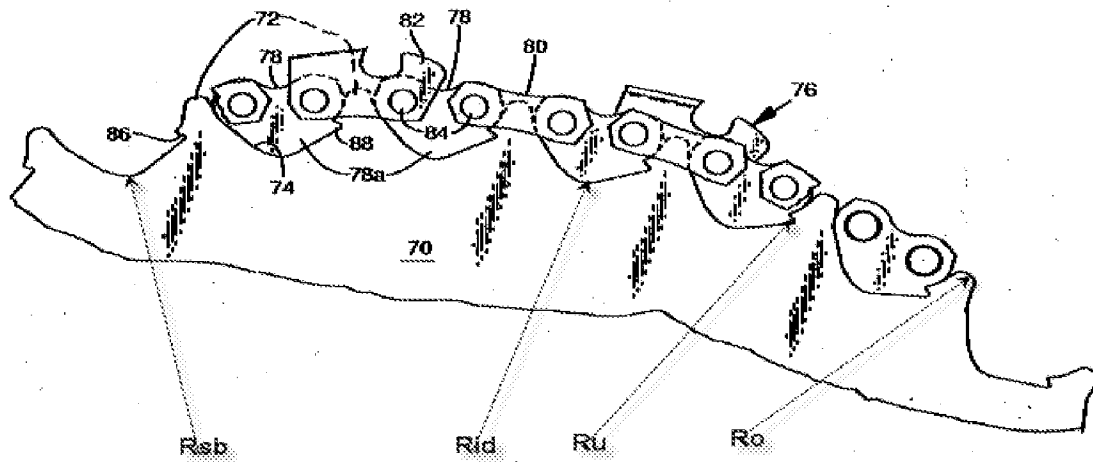
Re claim 1, Carlton discloses disc saw blade 60 with a saw chain 76 mounted around the circumference of a circular disk 70, the saw chain 76 is provided with driving links 78, connecting links 80 and cutting links 82, wherein the chain 76 is guided by means of the driving links 78 in at least one chain groove. It should be noted that the groove is formed by plates 66, 68, and disc 72 per Fig.4 as explained in col. 3, lines 43-46. Carlton also discloses that the chain 76 is arranged around the periphery of the disk 70, against the bottom 74 of the groove, a projecting part 78a of each driving link that projects radially inwards can make contact, in that the bottom 74 of the groove has radial projections 86 distributed around the circumference and the driving link has a cam surface 88 on the part 78a that projects radially inwards for interaction with the respective radial projection 86, and in that the chain 76 when driven, moves from a neutral position, in which the chain is loosely mounted around the circumference of the disk 70 and the projecting part 78a of the respective driving link 78 is loosely inserted

Art Unit: 3724

between two adjacent radial projections 86, to a working position, in which the chain is tensioned around the circumference of the disk 70 and the cam surface 88 on the respective driving link is in contact with the associated radial projection 86 per Fig. 5; wherein the length of the saw chain 76 is matched to the radius "ro" of the disk 70, so that with the saw chain 76 and the disk 70 is arranged concentrically in the neutral position, a radius "Rid" to the projecting part 78a (bottom portion) of each driving link 78 is larger than a radius Rsb to the bottom of the groove 74 and less than a radius "Ru" to each projection 86 per modified Fig. 5 shown above. It should be noted that the equivalent markings of the radii is performed to clarify the understanding of relationship amongst various radii. As 78a portion of the driving link fits into the gulley area 74 of the disc 70, it is apparent and inherent that area of the portion 78a is smaller. Hence, the Rid, distance of the bottom portion of 78a to the center of the disc 70, is greater than the Rsb, the distance of the bottom (valley) portion of the gulley 74 with respect to the center of the disc 70.

Re claim 2, Carlton discloses that the cam surface 88 on each driving link 78 is designed to press the chain 76 radially outwards against the radial projection 86 by the cam effect, in such a way that, in a tensioned state, the chain is held onto the disk 70 as a result of its shape per Fig. 5 and per col. 4, lines 3-36.

FIG. 5



Re claim 4, Carlton discloses that the bottom 74 of the groove has a predetermined number of projections 86 distributed evenly around the circumference of the disk 70 per Fig. 5.

Re claim 5, Carlton discloses that the bottom 74 of the groove has one projection 86 for each driving link 78 per Fig. 5.

Re claim 6, Carlton discloses that radial cross-section of each projection 86 is lug shaped per Fig. 5.

Re claim 7, Carlton discloses that radial cross-section of each projection 86 is pyramid shaped per Fig. 5.

Re claim 8, Carlton discloses that radial cross-section of each projection 86 is dome shaped per Fig. 5.

Re claim 9, Carlton discloses that radial cross-section of each projection 86 is designed as a truncated cone that has a complementary shape to the cam surface 78a of the interacting driving link 78 per Fig. 5.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carlton in view of Bueneman 2,958,348.

Re claim 10, Carlton teaches the invention as claimed as discussed above. However, Carlton fails to teach that, for a disk with several saw chains that run parallel, a corresponding chain groove is formed in the disk for each saw chain. Bueneman teaches that, for a disk with several saw chains that run parallel, a corresponding chain groove is formed in the disk for each saw chain per col. 1, lines 19-29.

It would have been obvious to one having ordinary skill in the art at the time of invention to provide Carlton's saw blade disk with gang type structure including multiple chain grove, as taught by Bueneman, in order to provide multiple cuts simultaneously.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to provide multiple disks to form a disk as a gang of multiple disks, since it is well known in the art as to use multiple disks to produce multiple cuts in order to improve productivity, since it has also been held that mere



Art Unit: 3724

duplication of the essential working parts of a device involves only routine skill in the art.

*St. Regis paper Co. V. Bemis Co., 193 USPQ 8.*

### ***Response to Arguments***

8. Applicant's arguments filed on 10/31/08 have been fully considered but they are not persuasive. In Remarks, Applicant argues that (1) Re claim 1, nowhere in Carlton is the item 88 described as a cam surface.

In response to argument (1), Examiner respectfully disagrees. The portion 88, 78a of the link and the portion 86 and 74 having a sliding motion, which acts as a cam and follower during the cutting and neutral positions of the disc blade. Therefore, Examiner still considers that Carlton satisfies the claimed subject matter.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3724

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BHARAT C. PATEL whose telephone number is (571)270-3078. The examiner can normally be reached on Monday-Friday, alt. Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 24502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bharat C Patel/  
Examiner, Art Unit 3724  
November 21, 2008.

/Ghassem Alie/  
Primary Examiner, Art Unit 3724